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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,580	08/02/2001	Norishisa Okada	648.40365X00	6329

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ANTONELLI, TERRY, STOUT & KRAUS, LLP
1300 NORTH SEVENTEENTH STREET
SUITE 1800
ARLINGTON, VA 22209-9889

EXAMINER

MUSSER, BARBARA J

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary

Application No.

09/890,580

Applicant(s)

OKADA ET AL.

Examiner

Barbara J. Musser

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 15-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 5 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 5, it is unclear what is meant by "moving said base on said....plate." It is unclear if this means the base moves the plate or moves along the plate or simply that the base is moved from its current location to another location.

Regarding claim 8, it is unclear which base is meant in line 5 as the claim has both a base and an arc-shaped base, and while the base is referred to, it is located in the same place as the arc-shaped base.

Claim Objections

3. Claim 12 is objected to because of the following informalities: in line 3, it appears "the" should be --to--. Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Palfey et al. in view of Banks et al.(U.S. Patent 6,036,802).

Palfey et al. discloses forming a bent laminate for specialized vehicles by bending a foam core and inner panel in a direction and then bending the outer panel in the same direction so it forms the outer layer and attaching it to the core via adhesive. It also discloses it is known in the art to bend a core and a second panel in a direction and then attach a first panel as the inner layer.(Col. 1, ll. 11-17; Col. 2, ll. 8-12, 53-56; Figures 2-4) One in the art reading the reference as a whole would appreciate that the method of Palfey et al. could be used to form a smooth inner panel by bending the inner panel alone rather than both the inner panel and the core and then bending one section and attaching a second and that smooth inner panels are desired in known in the art. The reference is silent as to the equipment used to bend the laminate. Banks et al. discloses an apparatus for forming a bend in a laminate for airplane interiors by holding one end of the laminate via vacuum while bending the other end.(Col. 1, ll. 45-51; Col. 7, ll. 10-48) It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the apparatus of Banks et al. to bend the laminate of Palfey et al. since Palfey et al. is silent as to the equipment required and since Banks et al. is directed to form a bend in the same type of laminate structure particularly since Banks et al. discloses the apparatus can be used for foam core panels as well as honeycomb core.(Col. 3, ll. 65- Col. 4, ll. 2)

Regarding claims 2 and 3, Palfey et al. discloses the adhesive is sprayed on both the panel and the core.(Col. 2, ll. 53-56)

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Regarding claim 4, one in the art would appreciate that could be applied in any conventional pattern such as in the width direction. Only the expected results would be achieved.

Regarding claims 5 and 7, Banks et al. does not disclose pulling the first panel into the bend via sucking. However, it does disclose using a vacuum to hold panels in place. One in the art reading the references as a whole would appreciate that vacuum could be used to bend the panel prior to bending the core since Palfey et al. discloses the panel is bent and since Banks et al. discloses it is known to use vacuum to move items.(Col. 7, ll. 10-48)

Regarding claim 8, one in the art would appreciate that since the bend formed in the panel is arc shaped, the apparatus used to form the bend would be arc shaped to ensure the proper curvature.

Regarding claim 9, the references are silent as to bending the core with a roller. However, the use of a roller to press something into a shape is well-known and conventional in the bonding arts and it would have been obvious to one of ordinary skill in the art at the time the invention was made for that reason.

Regarding claim 14, while Banks et al. does not specifically disclose a honeycomb panel with foam in the cells, it does disclose a foam panel and a honeycomb panel and that the apparatus can be used for other types of commonly used panels.(Col. 7, ll. 65- Col. 8, ll. 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to bend a honeycomb panel with foam in the

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cells since which is a well-known type of panel and since Banks et al. discloses the apparatus can be used for any type of panel.

6. Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Banks et al. in view of Palfey et al.

Banks et al. discloses an apparatus for forming a bend in a laminate for airplane interiors by holding one end of the laminate via vacuum while bending the other end.(Col. 1, ll. 45-51; Col. 7, ll. 10-48) A portion of the inner panel is heated to debond the adhesive and pulled from the laminate.(Abstract; Figures 19-21) It does not disclose heating and pulling all of the inner panel from the bend to the edge of the panel. Palfey et al. discloses forming a bent laminate for specialized vehicles by bending a foam core and inner panel in a direction and then bending the second panel in the same direction so it forms the outer layer and attaching it to the core via adhesive to form an attractive surface. It would have been obvious to one of ordinary skill in the art at the time the invention was made to heat and remove the portion of the inner panel of Banks et al. extending from the bend to the edge and re-applying it after bending since this would form a more attractive appearance as desired by Banks et al.(Col. 1, ll. 21-24) since Palfey et al. discloses unbonding and rebonding a face sheet to form an attractive appearance to the panel.

Regarding claims 2 and 3, Palfey et al. discloses the adhesive is sprayed on both the panel and the core.(Col. 2, ll. 53-56)

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Regarding claim 4, one in the art would appreciate that could be applied in any conventional pattern such as in the width direction. Only the expected results would be achieved.

Regarding claims 5 and 7, Banks et al. does not disclose pulling the first panel into the bend via sucking. However, it does disclose using a vacuum to hold panels in place. One in the art reading the references as a whole would appreciate that vacuum could be used to bend the panel prior to bending the core since Palfey et al. discloses the panel is bent and since Banks et al. discloses it is known to use vacuum to move items.(Col. 7, ll. 10-48)

Regarding claim 8, one in the art would appreciate that since the bend formed in the panel is arc shaped, the apparatus used to form the bend would be arc shaped to ensure the proper curvature.

Regarding claim 9, the references are silent as to bending the core with a roller. However, the use of a roller to press something into a shape is well-known and conventional in the bonding arts and it would have been obvious to one of ordinary skill in the art at the time the invention was made for that reason.

Regarding claim 14, while Banks et al. does not specifically disclose a honeycomb panel with foam in the cells, it does disclose a foam panel and a honeycomb panel and that the apparatus can be used for other types of commonly used panels.(Col. 7, ll. 65- Col. 8, ll. 2) It would have been obvious to one of ordinary skill in the art at the time the invention was made to bend a honeycomb panel with foam in the

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cells since which is a well-known type of panel and since Banks et al. discloses the apparatus can be used for any type of panel.

Response to Arguments

7. Applicant's arguments filed 9/8/03 have been fully considered but they are not persuasive.

Regarding applicant's argument that Palfey et al. does not disclose that the detached surface is bent to form a curve to which the remainder of the material is then bent and attached, Palfey et al. does disclose bending a surface and then bending the remainder of the material to the shape of the bent surface, but the first surface in the case of Palfey et al. is the core and first sheet rather than the first sheet alone. The primary difference between the references is which sheet the core is attached to during the bending operation. In Palfey et al. it is attached to the first sheet being bent while in applicant's claim it is attached to the second sheet being bent. Since the reference separates the second sheet so that the second sheet will form a smooth surface when re-attached and since Palfey et al. discloses it is known to form a smooth inner surface rather than a smooth outer surface, it would have been obvious to one of ordinary skill in the art at the time the invention was made to leave the core attached to the second sheet rather than bend it with the first since this would form a smooth inner surface rather than a smooth outer surface.

Regarding applicant's argument that the shape of the detached surface of Palfey et al. has no relevance to the shape of the product, those in the art know that the shape of the bent surface has relevance to the shape of the product. Applicant is referring to

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only what is explicitly taught in the reference, not what one in the art reading the reference as a whole would see.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

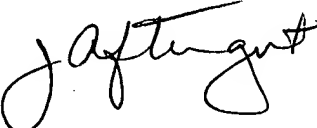
Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Barbara J. Musser** whose telephone number is **(703)-305-1352** until December 20 when it changes to (571) 272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on 703-308-3853. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9310.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.


BJM


JEFF H. AFTERGUT
PRIMARY EXAMINER
GROUP 1300